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```
RAW SEQUENCE LISTING                    DATE: 02/19/2002
PATENT APPLICATION:  US/10/057,550      TIME: 12:37:22

    Input Set : N:\Crf3\RULE60\10057550.txt
    Output Set: N:\CRF3\02192002\J057550.raw
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         3 <110> APPLICANT: Monia, Brett P.
         5 <120> TITLE OF INVENTION: Antisense Oligonucleotide Modulation of raf Gene Expression
W-->     7 <130> FILE REFERENCE:
         9 <140> CURRENT APPLICATION NUMBER: 10/057,550
        10 <141> CURRENT FILING DATE: 2002-01-25
        12 <150> PRIOR APPLICATION NUMBER: 09/506,073
        13 <151> PRIOR FILING DATE: 2000-02-18
        15 <150> PRIOR APPLICATION NUMBER: US 09/143,214
        16 <151> PRIOR FILING DATE: 1998-08-28
        18 <150> PRIOR APPLICATION NUMBER: PCT/US98/13961
        19 <151> PRIOR FILING DATE: 1998-07-06
        21 <150> PRIOR APPLICATION NUMBER: US 08/888,982
        22 <151> PRIOR FILING DATE: 1997-07-07
        24 <150> PRIOR APPLICATION NUMBER: US 08/756,806
        25 <151> PRIOR FILING DATE: 1996-11-26
        27 <150> PRIOR APPLICATION NUMBER: PCT/US95/07111
        28 <151> PRIOR FILING DATE: 1995-05-31
        30 <150> PRIOR APPLICATION NUMBER: US 08/250,856
        31 <151> PRIOR FILING DATE: 1994-05-31
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        35 <210> SEQ ID NO: 1
        36 <211> LENGTH: 20
        37 <212> TYPE: DNA
        38 <213> ORGANISM: artificial sequence
        40 <220> FEATURE:
        41 <223> OTHER INFORMATION: antisense sequence
        43 <400> SEQUENCE: 1
        44 tgaaggtgag ctggagccat                         20
        46 <210> SEQ ID NO: 2
        47 <211> LENGTH: 20
        48 <212> TYPE: DNA
        49 <213> ORGANISM: artificial sequence
        51 <220> FEATURE:
        52 <223> OTHER INFORMATION: antisense sequence
        54 <400> SEQUENCE: 2
        55 gctccattga tgcagcttaa                         20
        57 <210> SEQ ID NO: 3
        58 <211> LENGTH: 20
        59 <212> TYPE: DNA
        60 <213> ORGANISM: artificial sequence
        62 <220> FEATURE:
        63 <223> OTHER INFORMATION: antisense sequence
        65 <400> SEQUENCE: 3
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RAW SEQUENCE LISTING
PATENT APPLICATION:  US/10/057,550

DATE: 02/19/2002
TIME: 12:37:22

Input Set : N:\Crf3\RULE60\10057550.txt
Output Set: N:\CRF3\02192002\J057550.raw

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66 ccctgtatgt gctccattga                              20
68 <210> SEQ ID NO: 4
69 <211> LENGTH: 20
70 <212> TYPE: DNA
71 <213> ORGANISM: artificial sequence
73 <220> FEATURE:
74 <223> OTHER INFORMATION: antisense sequence
76 <400> SEQUENCE: 4
77 ggtgcaaagt caactagaag                              20
79 <210> SEQ ID NO: 5
80 <211> LENGTH: 20
81 <212> TYPE: DNA
82 <213> ORGANISM: artificial sequence
84 <220> FEATURE:
85 <223> OTHER INFORMATION: antisense sequence
87 <400> SEQUENCE: 5
88 attcttaaac ctgagggagc                              20
90 <210> SEQ ID NO: 6
92 <211> LENGTH: 20
93 <212> TYPE: DNA
94 <213> ORGANISM: artificial sequence
96 <220> FEATURE:
97 <223> OTHER INFORMATION: antisense sequence
99 <400> SEQUENCE: 6
100 gatgcagctt aaacaattct                             20
102 <210> SEQ ID NO: 7
103 <211> LENGTH: 20
104 <212> TYPE: DNA
105 <213> ORGANISM: artificial sequence
107 <220> FEATURE:
108 <223> OTHER INFORMATION: antisense sequence
110 <400> SEQUENCE: 7
111 cagcactgca aatggcttcc                             20
113 <210> SEQ ID NO: 8
114 <211> LENGTH: 20
115 <212> TYPE: DNA
116 <213> ORGANISM: artificial sequence
118 <220> FEATURE:
119 <223> OTHER INFORMATION: antisense sequence
121 <400> SEQUENCE: 8
122 tcccgcctgt gacatgcatt                             20
124 <210> SEQ ID NO: 9
125 <211> LENGTH: 20
126 <212> TYPE: DNA
127 <213> ORGANISM: artificial sequence
129 <220> FEATURE:
130 <223> OTHER INFORMATION: antisense sequence
132 <400> SEQUENCE: 9
133 gccgagtgcc ttgcctggaa                             20
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RAW SEQUENCE LISTING                    DATE: 02/19/2002
PATENT APPLICATION:  US/10/057,550      TIME: 12:37:22

      Input Set : N:\Crf3\RULE60\10057550.txt
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135 <210> SEQ ID NO: 10
136 <211> LENGTH: 20
137 <212> TYPE: DNA
138 <213> ORGANISM: artificial sequence
140 <220> FEATURE:
141 <223> OTHER INFORMATION: antisense sequence
143 <400> SEQUENCE: 10
144 agagatgcag ctggagccat                              20
146 <210> SEQ ID NO: 11
147 <211> LENGTH: 20
148 <212> TYPE: DNA
149 <213> ORGANISM: artificial sequence
151 <220> FEATURE:
152 <223> OTHER INFORMATION: antisense sequence
154 <400> SEQUENCE: 11
155 aggtgaaggc ctggagccat                              20
157 <210> SEQ ID NO: 12
158 <211> LENGTH: 20
159 <212> TYPE: DNA
160 <213> ORGANISM: artificial sequence
162 <220> FEATURE:
163 <223> OTHER INFORMATION: antisense sequence
165 <400> SEQUENCE: 12
166 gtctggcgct gcaccactct                              20
168 <210> SEQ ID NO: 13
169 <211> LENGTH: 20
170 <212> TYPE: DNA
171 <213> ORGANISM: artificial sequence
173 <220> FEATURE:
174 <223> OTHER INFORMATION: antisense sequence
176 <400> SEQUENCE: 13
177 ctgatttcca aaatcccatg                              20
179 <210> SEQ ID NO: 14
180 <211> LENGTH: 20
181 <212> TYPE: DNA
182 <213> ORGANISM: artificial sequence
184 <220> FEATURE:
185 <223> OTHER INFORMATION: antisense sequence
187 <400> SEQUENCE: 14
188 ctgggctgtt tggtgcctta                              20
190 <210> SEQ ID NO: 15
191 <211> LENGTH: 20
192 <212> TYPE: DNA
193 <213> ORGANISM: artificial sequence
195 <220> FEATURE:
196 <223> OTHER INFORMATION: antisense sequence
198 <400> SEQUENCE: 15
199 tcagggctgg actgcctgct                              20
201 <210> SEQ ID NO: 16

RAW SEQUENCE LISTING                    DATE: 02/19/2002
PATENT APPLICATION:  US/10/057,550      TIME: 12:37:22

        Input Set : N:\Crf3\RULE60\10057550.txt
        Output Set: N:\CRF3\02192002\J057550.raw

```
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203 <212> TYPE: DNA
204 <213> ORGANISM: artificial sequence
206 <220> FEATURE:
207 <223> OTHER INFORMATION: antisense sequence
209 <400> SEQUENCE: 16
210 ggtgagggag cgggaggcgg                                    20
212 <210> SEQ ID NO: 17
213 <211> LENGTH: 20
214 <212> TYPE: DNA
215 <213> ORGANISM: artificial sequence
217 <220> FEATURE:
218 <223> OTHER INFORMATION: antisense sequence
220 <400> SEQUENCE: 17
221 cgctcctcct ccccgcggcg                                    20
223 <210> SEQ ID NO: 18
224 <211> LENGTH: 20
225 <212> TYPE: DNA
226 <213> ORGANISM: artificial sequence
228 <220> FEATURE:
229 <223> OTHER INFORMATION: antisense sequence
231 <400> SEQUENCE: 18
232 ttcggcggca gcttctcgcc                                    20
234 <210> SEQ ID NO: 19
235 <211> LENGTH: 20
236 <212> TYPE: DNA
237 <213> ORGANISM: artificial sequence
239 <220> FEATURE:
240 <223> OTHER INFORMATION: antisense sequence
242 <400> SEQUENCE: 19
243 gccgccccaa cgtcctgtcg                                    20
245 <210> SEQ ID NO: 20
246 <211> LENGTH: 20
247 <212> TYPE: DNA
248 <213> ORGANISM: artificial sequence
250 <220> FEATURE:
251 <223> OTHER INFORMATION: antisense sequence
253 <400> SEQUENCE: 20
254 tcctcctccc cgcggcgggt                                    20
256 <210> SEQ ID NO: 21
257 <211> LENGTH: 20
258 <212> TYPE: DNA
259 <213> ORGANISM: artificial sequence
261 <220> FEATURE:
262 <223> OTHER INFORMATION: antisense sequence
264 <400> SEQUENCE: 21
265 ctcgcccgct cctcctcccc                                    20
267 <210> SEQ ID NO: 22
268 <211> LENGTH: 20
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Input Set : N:\Crf3\RULE60\10057550.txt
Output Set: N:\CRF3\02192002\J057550.raw

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269 <212> TYPE: DNA
270 <213> ORGANISM: artificial sequence
272 <220> FEATURE:
273 <223> OTHER INFORMATION: antisense sequence
275 <400> SEQUENCE: 22
276 ctggcttctc ctcctcccct                                      20
278 <210> SEQ ID NO: 23
279 <211> LENGTH: 20
280 <212> TYPE: DNA
281 <213> ORGANISM: artificial sequence
283 <220> FEATURE:
284 <223> OTHER INFORMATION: antisense sequence
286 <400> SEQUENCE: 23
287 cgggaggcgg tcacattcgg                                      20
289 <210> SEQ ID NO: 24
290 <211> LENGTH: 20
291 <212> TYPE: DNA
292 <213> ORGANISM: artificial sequence
294 <220> FEATURE:
295 <223> OTHER INFORMATION: antisense sequence
297 <400> SEQUENCE: 24
298 tctggcgctg caccactctc                                      20
300 <210> SEQ ID NO: 25
301 <211> LENGTH: 2977
302 <212> TYPE: DNA
303 <213> ORGANISM: homo sapiens
305 <220> FEATURE:
307 <400> SEQUENCE: 25
308 ccgaatgtga ccgcctcccg ctccctcacc cgccgcgggg aggaggagcg      50
309 ggcgagaagc tgccgccgaa cgacaggacg ttggggcggc ctggctccct     100
310 caggtttaag aattgtttaa gctgcatcaa tggagcacat acagggagct     150
311 tggaagacga tcagcaatgg ttttggattc aaagatgccg tgtttgatgg     200
312 ctccagctgc atctctccta caatagttca gcagtttggc tatcagcgcc     250
313 gggcatcaga tgatggcaaa ctcacagatc cttctaagac aagcaacact     300
314 atccgtgttt tcttgccgaa caagcaaaga acagtggtca atgtgcgaaa     350
315 tggaatgagc ttgcatgact gccttatgaa agcactcaag gtgaggggcc     400
316 tgcaaccaga gtgctgtgca gtgttcagac ttctccacga acacaaaggt     450
317 aaaaaagcac gcttagattg gaatactgat gctgcgtctt tgattggaga     500
318 agaacttcaa gtagatttcc tggatcatgt tccccctcaca acacacaact     550
319 ttgctcggaa gacgttcctg aagcttgcct tctgtgacat ctgtcagaaa     600
320 ttcctgctca atggatttcg atgtcagact tgtggctaca aatttcatga     650
321 gcactgtagc accaaagtac ctactatgtg tgtggactgg agtaacatca     700
322 gacaactctt attgtttcca aattccacta ttggtgatag tggagtccca     750
323 gcactacctt ctttgactat gcgtcgtatg cgagagtctg tttccaggat     800
324 gcctgttagt tctcagcaca gatattctac acctcacgcc ttcacctta      850
325 acacctccag tccctcatct gaaggttccc tctcccagag gcagaggtcg     900
326 acatccacac ctaatgtcca catggtcagc accacgctgc ctgtggacag     950
327 caggatgatt gaggatgcaa ttcgaagtca cagcgaatca gcctcacctt    1000
328 cagccctgtc cagtagcccc aacaatctga gcccaacagg ctggtcacag    1050
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**VERIFICATION SUMMARY**          DATE: 02/19/2002
**PATENT APPLICATION:  US/10/057,550**          TIME: 12:37:23

Input Set : N:\Crf3\RULE60\10057550.txt
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```
L:7 M:201 W: Mandatory field data missing, FILE REFERENCE
L:431 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:29
L:431 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:29
L:431 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:29
L:431 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:29
L:882 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:66
L:882 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:66
L:882 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:66
L:882 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:66
L:891 M:258 W: Mandatory Feature missing, <221> not found for SEQ ID#:66
L:891 M:258 W: Mandatory Feature missing, <222> not found for SEQ ID#:66
L:891 M:258 W: Mandatory Feature missing, <223> not found for SEQ ID#:66
L:891 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:66
L:1379 M:283 W: Missing Blank Line separator, <400> field identifier
L:1650 M:283 W: Missing Blank Line separator, <220> field identifier
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